

SYSTEM AND METHOD FOR DETECTING ANOMALOUS TARGETS  
INCLUDING CANCEROUS CELLS

Abstract of the Disclosure

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A method and system for identifying anomalous cells includes an imaging subsystem to generate a track file from collected images of cells, a image processing subsystem to extract features from the track file and generate feature sets for particular cells, and a discrimination subsystem to generate a probabilistic belief function from the feature sets to determine a probability that at least some of the cells are anomalous. The images may include sample cells from a tissue sample. In embodiments, the imaging subsystem may collect images from photographs and may also collect images from a microscope. In embodiments, the discrimination subsystem may perform both supervised and unsupervised training to update the belief functions learning from known anomalous cells and cells with know anomalous features to enhance its accuracy over time.

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